

Serial No.: 10/604,998

Confirmation No.: 1997

Applicant: BERTILSSON, Bert-Inge *et al.*

Atty. Ref.: 07589.0130.PCUS00

REMARKS:

REMARKS REGARDING CLAIMS AMENDMENTS, CANCELLATIONS AND ADDITIONS:

Claims 1, 13, 14 and 16 have been amended, claims 10 and 11 have been cancelled and new claims 25 and 26 have been added. Claims 1 - 9 and 12 - 26 are pending in the present application.

Serial No.: 10/604,998

Confirmation No.: 1997

Applicant: BERTILSSON, Bert-Inge *et al.*

Atty. Ref.: 07589.0130.PCUS00

IN RESPONSE TO THE OFFICE ACTION:

Discussion of differences between the present invention and the cited references can be succinctly appreciated via the following comparative review of the reference teachings and the claimed subject matter.

COMPARISON OF THE PRESENTLY CLAIMED INVENTION
AGAINST THE TEACHINGS OF THE CITED REFERENCES

Claims Requirements of the Present Invention	Teachings of the References
<p>The present invention addresses longitudinal positioning and length of an outlet path included in a feed pipe that delivers exhaust gas for recirculation into the air supply of an internal combustion engine.</p> <p>Claim 1 recites "an outlet path (a) that extends in the longitudinal direction of the duct (2) and the length of which is longer than the diameter of the feed pipe (1) -."</p> <p>Further limitations of "outlet path length" appear in claims 2, 3 and 16 - 21.</p>	<p>U.S. 4,024,847 (Koganemaru) teaches a recirculation tube (4) for introducing exhaust gas into an intake tube (2) separated from the recirculation tube (4) by a partition wall (5). The reference does not teach a feed pipe, according to amended claim 1 of the present invention that includes an outlet section having an outlet path positioned longitudinally in an air carrying duct.</p> <p>U.S. 4,135,481 (Resler) includes a supply tube used to recirculate exhaust gas into the inlet manifold of an engine. Figure 1 of the reference illustrates the supply tube as a split dual gas feed device transverse to the axis of the inlet manifold.</p> <p>U.S. 6,293,266 (Oetting) does not teach a feed pipe for exhaust gases and is therefore silent regarding the disposition or length of an outlet path opening from the outlet section of the feed pipe.</p>

Serial No.: 10/604,998

Confirmation No.: 1997

Applicant: BERTILSSON, Bert-Inge *et al.*

Atty. Ref.: 07589.0130.PCUS00

REJECTION UNDER 35 U.S.C. § 102:

According to the Office Action, Claims 1 - 4, 11, 12 and 16 - 21 are rejected under 35 U.S.C. §102(b) as being anticipated by Koganemaru ('847) which is asserted to comprise four openings (6A - 6D), which extends at least four times the diameter of the feed pipe (4). The present amendment to claim 1 clarifies that the recited feed pipe (1) includes an outlet section (3) comprising at least one outlet (4), inside an air duct (2). Koganemaru ('847) teaches a recirculation tube (4) for introducing exhaust gas into an intake tube (2), but a partition wall (5) separates the recirculation tube (4) from the intake tube (2). Also, the section, comprising the four openings, lies adjacent to the partition wall (5) that separates the intake tube (2) into two portions.

Amendment of claim 1 of the present invention more closely characterizes the exhaust gas recirculation system disclosed in Figures 3, 5a, 5b, and 5c and described in the associated portion of the specification. In view thereof, it is respectfully asserted that Koganemaru ('847) does not teach or anticipate claim 1 as presently recited.

Regarding the rejection of Claims 1, 10, 13 and 16 under 35 U.S.C. §102(b), as being anticipated by Resler, Jr. ('481), the two outlets (222, 224) enter the inlet manifold of an engine as a split tube transverse to the axis of the inlet manifold. The two outlets (222, 224) represent two exhaust gas supplies, which differs from "an exhaust gas pulse" as recited in claim 1 of the present application. Therefore, the teachings of Resler, Jr. ('481), which appear to rely on Figure 1 thereof, fail to anticipate all the limitations of claims according to the present invention, making this reference ineffective as an anticipating reference under 35 U.S.C. §102(b).

Claims 1 and 16, as amended, also render Oetting ('266) deficient as a basis for anticipation of claims 1, 2, 6 and 16 of the present invention. Oetting ('266) teaches a feed pipe (9) running adjacent to, but not inside, an intake tube (2) that receives exhaust gas fed from the feed pipe (9) using an intervening valve.

Applicants respectfully assert that the claims in their present form overcome the cited rejections under 35 U.S.C. §102(b) in view of Koganemaru, Resler, Jr., and Oetting. Request is therefore made for reconsideration and withdrawal of the rejection of claims 1-4, 6, 10, - 13 and 16 - 21 of the present invention.

Serial No.: 10/604,998

Confirmation No.: 1997

Applicant: BERTILSSON, Bert-Inge *et al.*

Atty. Ref.: 07589.0130.PCUS00

REJECTION UNDER 35 U.S.C. § 103(a):

Claims 14 and 15 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Koganemaru in view of Marthaler et al ('382). For reasons presented previously, claim 1 of the present invention, as amended, is patentable over the reference of Koganemaru. Claims 14 and 15 depend from claim 1 and are likewise patentable even, in light of the reference of Marthaler et al. which only teaches an air/exhaust mixer assembly without any disclosure, teaching or even suggestion of a venturi.

In view of the above, combination of the references of Koganemaru and Marthaler et al. fails to satisfy the requirements for rejection of the present invention for obviousness under 35 USC §103. Therefore, applicants request reconsideration and withdrawal of the rejection of claims 14 and 15 under 35 USC §103(a).

ALLOWABLE SUBJECT MATTER:

Applicants acknowledge notification that rewriting claims 5, 7 - 9 and 22 - 24 would provide allowable claims. New claims 25 and 26 provide allowable independent claims that include the limitations of original claims 5 and 22, respectively.

CONCLUSION:

A review of the prior art of Higashi and Fischer et al. that has been made of record but not relied upon suggests that the references are not pertinent to the claimed structure for exhaust gas recirculation using a feed pipe including an outlet section configured according to Applicants' present claim recitations.

Applicants have made an earnest attempt to respond to all the points included in the Office Action and, in view of the above, submit that rejections under 35 USC §102 and 35 USC §103 have been overcome. Consequently, request is respectfully made for reconsideration of the application and notification of the allowance of claims 1 - 9 and 12 - 26 in the next paper from the Office.

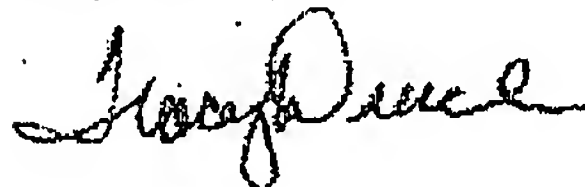
Serial No.: 10/604,998
Confirmation No.: 1997
Applicant: BERTILSSON, Bert-Inge *et al.*
Atty. Ref.: 07589.0130.PCUS00

The undersigned representative requests any extension of time that may be deemed necessary to further the prosecution of this application.

The undersigned representative authorizes the Commissioner to charge any additional fees under 37 C.F.R. 1.16 or 1.17 that may be required, or credit any overpayment, to Deposit Account No. 14-1437, referencing Order No. 07589.0130.PCUS00.

In order to facilitate the resolution of any issues or questions presented by this paper, the Examiner should directly contact the undersigned by phone to further the discussion.

Respectfully submitted,



Tracy Druce
Patent Attorney
Reg. No. 35,493
Tel. 202.659.0100